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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/803,872

03/18/2004

Radoslaw Romuald Zakrzewski

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EXAMINER

COUGHLAN, PETER D

ART UNIT

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2129

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

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<b>Office Action Summary</b>	Application No. 10/803,872	Applicant(s) ZAKRZEWSKI, RADOSLAW ROMUALD	
	Examiner Peter Coughlan	Art Unit 2129	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 November 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## Detailed Action

1. This office action is in response to an AMENDMENT entered November 13, 2007 for the patent application 10/803872 filed on March 18, 2004.
2. The First Office Action of January 9, 2007 is fully incorporated into this Final Office Action by reference.

### ***Status of Claims***

3. Claims 1-36 are pending.

### ***35 USC § 101***

4. 35 U.S.C. 101 reads as follows:  
Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-36 are rejected under 35 U.S.C. 101 for nonstatutory subject matter. The computer system must set forth a practical application of that § 101 judicial exception to

produce a real-world result. Benson, 409 U.S. at 71-72, 175 USPQ at 676-77. The verification of the accuracy of a component lacks a practical application. This statement is within the realm of being abstract due to its nature it can be applied to numerous real world applications. The result has to be a practical application.

In addition, the claims and specification obtain preemption. Within the abstract, the invention can be used for, 'neural networks or other hardware or software component.' In addition, the model may be a fuzzy logic model, a fuzzy logic classifier, and a statistical k-neighbor classifier. (¶0009) Although this is abstract it leads to a staggering amount of possible uses and applications.

In determining whether the claim is for a "practical application," the focus is not on whether the steps taken to achieve a particular result are useful, tangible and concrete, but rather that the final result achieved by the claimed invention is "useful, tangible and concrete." If the claim is directed to a practical application of the § 101 judicial exception producing a result tied to the physical world that does not preempt the judicial exception, then the claim meets the statutory requirement of 35 U.S.C. § 101. Is this model that of the flight characteristics of an aircraft wing, or a model of the spread of a disease through out a country, or a model of obesity among people of a given region? If so, no such results have not been claimed.

The invention must be for a practical application and either:

- 1) specify transforming (physical thing) or
- 2) have the FINAL RESULT (not the steps) achieve or produce a useful (specific, substantial, AND credible),

concrete (substantially repeatable/ non-unpredictable), AND  
tangible (real world/ non-abstract) result.

A claim that is so broad that it reads on both statutory and non-statutory subject matter, must be amended.

A claim that recites an invention that 'verifies' has no practical application. The claimed invention is an abstract concept that can lead to numerous applications but as stated within the specification, falls short of a practical application. There must be a result that is a practical application.

Claims 1, 16-19, 34-36 are rejected under 35 U.S.C. 101 because the claimed invention lacks patentable utility. These claims contain the variable  $\epsilon$  which is allowed to approach zero. When  $\epsilon$  approaches 0, the value of  $1/\epsilon$  approaches infinity. Thus these claims lack utility.

Claims 1, 16-17, 19, 34-35 are rejected under 35 U.S.C. 101 because the claimed invention lacks patentable utility. The value  $\delta$  is allowed to approach zero and the value of  $\ln(1/\delta)$  approaches negative infinity. Thus these claims lack utility.

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 12 and 30 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. There is no explanation which explains a 'receiving a value of zero for p-est, an estimate of p based on a random sample, p representing a probability that a randomly selected data value is in accordance with a selected criterion, F' or 'receiving a  $\delta$ ' or 'receiving a  $\epsilon$ '

Under section 2164.01(a) of the MPEP 7 areas need to be addressed for a test of enablement.

(A) The breadth of the claims. The independent claims pertain to 'receiving a value of zero' which is based on an estimation which in turn is based on a 'random sample' which has some undefined selection criterion 'F.' The breadth of the claims gives no indication how to receive a value of zero based on these numerous requirements' or 'receiving a  $\delta$ ' or 'receiving a  $\epsilon$ .'

(B) The nature of the invention. There is no nature of the invention (see 35 U.S.C. §101 rejection) which connects 'verifying a component' and the 'receiving a

value which is based on numerous parameters.'

(C) The state of the prior art. The prior art of verifying the accuracy of a neural network does not map to the current invention.

(D) The level of one of ordinary skill. There is little indication within the specification which illustrates how all these components are related to generate 'receiving a value.' These words are repeated only in paragraphs 0011 and 0017 but does not describe a clearer picture.

(E) The level of predictability in the art. Since there is no specific domain in which the invention can be employed, there exists no specific level of predictability in the art which could aid the Examiner.

(F) The amount of direction provided by the inventor. There are no pseudo code, pseudo examples, formulas or algorithms which would aid the Examiner on how to interpret a 'receiving a value of zero for p-est, an estimate of p based on a random sample, p representing a probability that a randomly selected data value is in accordance with a selected criterion, F' or 'receiving a  $\delta$ ' or 'receiving a  $\epsilon$ '

(G) The existence of working examples. These exists no working examples within the specification which clarifies how a 'receiving a value of zero for p-est, an estimate of p based on a random sample, p representing a probability that a randomly selected data value is in accordance with a selected criterion, F' or 'receiving a  $\delta$ ' or 'receiving a  $\epsilon$ '

(H) The quantity of experimentation needed to make or use the invention based on the content of the disclosure. Since there are numerous applications in which the

invention could be used the amount of experimentation would be enormous.

In re Wands, 858 F.2d 731, 737, 8 USPQ2d 1400, 1404 (Fed. Cir. 1988).

These claims and/or specification must be amended or the claims must be withdrawn from consideration.

### ***Response to Arguments***

5. Applicant's arguments filed on November 13, 2007 for claims 1-36 have been fully considered but are not persuasive.

6. In reference to the Applicant's argument:

#### **REMARKS**

This paper is being provided in response to the Office Action dated August 9, 2007, for the above-referenced application. In this response, Applicant has amended claims 1, 3, 4, 8, 12, 19, 21, 22, 26 and 30 to clarify that which Applicant considers to be the presently-claimed invention. Applicant respectfully submits that the amendments to the claims are fully supported by the originally-filed specification.

The rejection of claims 1-36 under 35 U.S.C. 101 for nonstatutory subject matter is hereby traversed and reconsideration is respectfully requested. The Office Action states that "Determining the correctness of a component by calculating mathematical formulas is not statutory" and states that to be statutory under 35 U.S.C. 101, a claim must be directed to a practical application having a final result that is useful (specific, substantial and credible); concrete (substantially repeatable / non-unpredictable); and tangible (real world/non-abstract). Applicant has amended the claims to clarify that a component is an implementation of a model and that randomly selected samples are from at least one test of the component. Applicant refers, for example, to page 43, line 6 to page 45, line



2 of the originally-filed specification and submit that that the final result of the presently-claimed invention is useful, concrete and tangible. Accordingly, Applicant respectfully submits that the rejection should be reconsidered and withdrawn.

The rejection of claims 1, 16-19, 34-36 under 35 U.S.C. 101 as lacking patentable utility is hereby traversed and reconsideration is respectfully requested. The Office Action appears to object to the use of a confidence value ( $\delta$ ) that is between 0 and 1, and its use in determining a number of randomly selected samples  $M$  in the equation  $M \geq (1/\epsilon) \ln(1/\delta)$  ultimately concluding that "infinity is less than infinity which makes no sense." Applicant respectfully submits that the above confidence value ( $\delta$ ) and selection of randomly selected samples does not yield the conclusion "infinity is less than infinity" so as to be senseless. The equation for selecting the number of randomly selected samples  $M$  does suggest that as the confidence value decreases, the number of randomly selected samples required by the claimed invention does increase, based on the natural log of one divided by the confidence value. The confidence value ( $\delta$ ) is specified as greater than 0 and less than 1, meaning  $1/\delta$  is never infinity; however, as noted above, it does characterize an analysis that the smaller a confidence value, the higher the number of random samples required, as dictated by the above-noted equation. Applicant submits there is no arbitrary cutoff as the confidence value ( $\delta$ ) becomes smaller and smaller with respect to the number of randomly selected samples recited by the claimed invention, within the stated bounds that the confidence values is greater than 0 and less than 1, but that the relationship between confidence value and number of randomly selected samples is accurately characterized by the equations, and defines patentable subject matter in conjunction with the other recited features. Applicant submits that this would be well understood by one of ordinary skill in the art, and Applicant respectfully requests that the rejection be reconsidered and withdrawn.

The rejection of claims 1, 12, 19 and 30 under 35 U.S.C. 101 as lacking patentable utility is hereby traversed and reconsideration is respectfully requested. The Office Action appears to object to an accuracy level ( $\epsilon$ ) being between 0 and 1 and its use in determining a number of randomly selected samples  $M$  in the equation  $M \geq (1/\epsilon) \ln(1/\delta)$ , in an apparently similar rejection noted above with respect to the confidence value ( $\delta$ ), and ultimately concluding that "infinity is less than infinity which makes no sense." Similar to the discussion above, rather than a senseless conclusion concerning infinity, the above-noted equations characterize the analysis that the smaller an accuracy level the higher the number of random samples required. The accuracy level ( $\epsilon$ ) is specified as greater than 0 and less than 1, meaning  $1/\epsilon$  is never infinity (or 1); however, as noted above, it does characterize an analysis that the smaller the accuracy level, the higher the number of random samples required, as dictated by the above-noted equation. Applicant submits there is no arbitrary cutoff as the accuracy level ( $\epsilon$ ) becomes smaller and smaller with respect to the number of randomly selected samples recited by the claimed invention, within the stated bounds that the accuracy level ( $\epsilon$ ) is greater than 0 and less than 1, but that the relationship between accuracy level and number of

randomly selected samples is accurately characterized by the equations, and defines patentable subject matter in conjunction with the other recited features. Applicant submits that this would be well understood by one of ordinary skill in the art, and respectfully requests that the rejection be reconsidered and withdrawn.

Examiner's response:

The amended claims which state 'a component is an implementation of a model' still lacks a practical application. Is this model that of the flight characteristics of an aircraft wing, or a model of the spread of a disease through out a country, or a model of obesity among people of a given region? No example is provided which illustrates a practical application of the invention.

As ' $\epsilon$ ' approaches 0,  $1/\epsilon$  approaches infinity. How can 'M' be larger than infinity? Stating that 'The confidence value ( $\delta$ ) is specified as greater than 0 and less than 1, meaning  $1/\delta$  is never infinity' is basically incorrect. As  $\delta$  approaches 0,  $1/\delta$  approaches infinity. Office Action stands.

7. In reference to the Applicant's argument:

The rejection of claim 1 under 35 U.S.C. 101 as lacking utility as stating "a probability of equal to or less than 6" is hereby traversed. The claim recites " and a probability that ( $p > \epsilon$ ) is equal to or less than 6". The "6" referred to in the Office Action is actually the confidence interval " $\delta$ ", as was filed, and as presently claimed. Accordingly, Applicant submits that this rejection should be reconsidered and withdrawn.

Examiner's response:

The Examiner notes the error in filing by the Office from  $\delta$  to 6.

8. In reference to the Applicant's argument:

The rejection of claims 1-4, 8, 12, 19-22, 26 and 30 under 35 U.S.C. 101 as lacking patentable utility because of the use of a selected criterion F is hereby traversed and reconsideration is respectfully requested. Applicant's selected criterion F is described in the specification (see, for example, beginning page 16, line 9) and recited in connection with a step of method for determining if each of the randomly selected samples is not in accordance with said selected criterion, F. Applicants disclose examples of selected criterion F in the specification and as recited in the dependent claims. For example, dependent claim 4 recites that the selected criterion F is that  $e(x)$  evaluates to a value that exceeds predetermined bounds. Applicant submits that a step of determining if each of randomly selected samples is not in accordance with the selected criterion F is fully described and enabled by the specification and would be fully understood by one of ordinary skill in the art. Accordingly, Applicant respectfully requests that the rejection be reconsidered and withdrawn.

Examiner's response:

Based on  $1/\delta$  can approach infinity, there must exist some selection criterion other than 'F' which allows the selected samples to reach infinity as well. Office Action stands.

9. In reference to the Applicant's argument:

The rejection of claims 1-36 under 35 U.S.C. 112, first paragraph on the basis of the rejections under 35 U.S.C. 101 is hereby traversed. Applicant refers to the above discussion concerning the rejection under 35 U.S.C. 101 and submit that the claims recite statutorily patentable subject matter that is described in the specification and complies with the written description requirement. Accordingly, Applicant respectfully requests that the rejection be reconsidered and withdrawn.

The rejection of claims 1-36 under 35 U.S.C. 112, first paragraph on the basis of the rejections under 35 U.S.C. 101 is hereby traversed. Applicant refers to the above discussion concerning the rejection under 35 U.S.C. 101 and submit that the claims recite statutorily patentable subject matter that is described in the specification and

complies with the written description requirement. Accordingly, Applicant respectfully requests that the rejection be reconsidered and withdrawn.

Examiner's response:

The specification does not disclose a practical application, therefore there is no indication how to enable the invention. Office Action stands.

10. In reference to the Applicant's argument:

The rejection of claims 1, 12, 19, 30-under 35 U.S.C. 112, first paragraph, with respect to the use of the probability  $p$  is hereby traversed. The Office Action states that in claims 1 and 19, the probability  $p$  is not in the formula 'm'. Assuming the Office Action's use of lower case 'm' refers to the number of randomly selected samples,  $M$ , then Applicant notes that  $M$  is defined as  $M \geq (1/\epsilon) \ln(1/\delta)$  and that  $\epsilon$  represents an accuracy level of  $p$ -est to its true value  $p$ , in the range  $0 < \epsilon < 1$ . Accordingly, the number of randomly selected samples  $M$  does incorporate the probability value  $p$  in determining the accuracy level  $\epsilon$ . Furthermore, the Office Action states that in claims 12 and 30, 'p' is used in accordance to a selected criterion  $F$ . It is unclear what the objection is to this use of  $p$  as recited. In claims 12 and 30,  $p$  is defined as representing a probability that a randomly selected data value is in accordance with a selected criterion  $F$ ;  $p$ -est is an estimate of  $p$  based on a random sample;  $\epsilon$  represents an accuracy level of  $p$ -est to its true value  $p$ , in the range  $0 < \epsilon < 1$ , wherein a probability that  $(p \geq \epsilon)$  is equal to or less than  $\delta$ ; and a number of randomly selected data values,  $M$ , wherein  $M$  is determined in accordance with  $p$ -est,  $\delta$ , and  $\epsilon$ . Applicants submits that the recited features are fully described and enabled by the specification (see, for example, page 14, line 5 to page 15, line 20 of the originally-filed specification) and would be fully understood by one of ordinary skill in the art. Accordingly, Applicant respectfully requests that the rejection be reconsidered and withdrawn.

Examiner's response:

There is no formula which describes the generation of the probability of 'p.' There is no formula which describes how the  $p$ -est value is generated based on the 'estimate of  $p$  based on the  $M$  randomly selected samples.' Office Action stands,

11. In reference to the Applicant's argument:

The rejection of claims 4, 22 under 35 U.S.C. 112, first paragraph, as lacking a definition in the specification of the functions  $e(x)$ ,  $f(x)$  and  $\phi(x)$  is hereby traversed. As noted beginning on page 13, line 20,  $f(x)$  is a neural net trained to replace a known function  $\phi(x)$  and, as noted beginning at page 16, line 1,  $e(x)$  is an error function defined by  $f(x) - \phi(x)$ . As defined in the claim,  $x$  is one of said points corresponding to one or more neural network inputs, where (for each point  $x$ , evaluated at  $f(x)$  and  $\phi(x)$ ),  $f(x)$  is a neural network output for a corresponding one of said points, and  $\phi(x)$  is an expected output for a corresponding one of said points. Accordingly, an error function determination of  $e(x)$  is based on evaluating, for each point  $x$ , the neural net function  $f(x)$  and known function  $\phi(x)$  that the neural net function is designed to replace, with the difference there between being the error function  $e(x)$ . Applicants submits that the claimed terms are fully described and enabled by the specification and that one of ordinary skill in the art would appreciate the claimed features. Accordingly, Applicants respectfully request that this rejection be reconsidered and withdrawn.

Examiner's response:

The Examiner does not find definitions of the functions  $e(x)$ ,  $f(x)$  and  $\phi(x)$  within the specification or within U.S. provisional patent application 60/458693. Office Action stands.

12. In reference to the Applicant's argument:

The rejection of claims 1, 8, 19 and 26 under 35 U.S.C. 112, second paragraph, because of the use of the term "correctness" has been addressed by amendments contained herein. In accordance with the guidelines set forth in the Office Action, Applicants have replaced the term "correctness" with "accuracy"; noting, however, that the word accuracy, like the word correctness, is also a noun, which is the appropriate grammatical usage in the phrase: verifying accuracy, or correctness, of a component. Accordingly, Applicants request that this rejection be reconsidered and withdrawn.

Examiner's response:

The Examiner notes the change of the term 'correctness' to 'accuracy.'

13. In reference to the Applicant's argument:

The rejection of claim 30 under 35 U.S.C. 112, second paragraph, as lacking antecedent basis for the term  $p$  is hereby traversed. Applicants have clarified the claim features as follows: receives a value of zero for  $p$ -est, an estimate of a probability  $p$  based on a random sample,  $p$  representing a probability that a randomly selected data value is in accordance with a selected criterion,  $F$ . Applicants note that  $p$  is recited as representing a probability that a randomly selected data value is in accordance with a selected criterion,  $F$ . Accordingly, Applicants submits that the term " $p$ " has appropriate antecedent basis and respectfully requests that the rejection be reconsidered and withdrawn.

Examiner's response:

The Examiner withdraws the rejection.

14. In reference to the Applicant's argument:

The rejection of claims 1-4, 8, 12, 19-22, 26, and 30 as being indefinite is hereby traversed. The term " $F$ " is not an isolated term in the claims but rather is recited in the claims as a selected criterion  $F$ , and Applicants refer to the discussion above concerning the selected criterion. Accordingly, the term " $F$ " refers to "selected criterion  $F$ " as recited in the claims and Applicants have amended certain claims to make clear that  $F$  is used to recite the selected criterion  $F$ . Accordingly, Applicants submit that the term selected criterion  $F$  is not an indefinite term and respectfully requests that the rejection be reconsidered and withdrawn.

Examiner's response:

$F$  is defined by the predetermined limits  $M_{i0}$  or  $M_{up}$  along with the undefined function  $e(x)$ . In ¶0046  $e(x) = f(x) - \phi(x)$  but neither  $f(x)$  or  $\phi(x)$  is defined. Office Action stands.

***Examination Considerations***

15. The claims and only the claims form the metes and bounds of the invention.

“Office personnel are to give the claims their broadest reasonable interpretation in light of the supporting disclosure. *In re Morris*, 127 F.3d 1048, 1054-55, 44USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. *In re Prater*, 415 F.2d, 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969)” (MPEP p 2100-8, c 2, I 45-48; p 2100-9, c-1, I 1-4). The Examiner has the full latitude to interpret each claim in the broadest reasonable sense. Examiner will reference prior art using terminology familiar to one of ordinary skill in the art. Such an approach is broad in concept and can be either explicit or implicit in meaning.

16. Examiner’s Notes are provided to assist the applicant to better understand the nature of the prior art, application of such prior art and, as appropriate, to further indicate other prior art that maybe applied in other office actions. Such comments are entirely consistent with the intent and spirit of compact prosecution. However, and unless otherwise stated, the Examiner’s Notes are not prior art but link to prior art that one of ordinary skill in the art would find inherently appropriate.

17. Examiner’s Opinion: Paragraphs 15 and 16 apply. The Examiner has full latitude to interpret each claim in the broadest reasonable sense.

***Conclusion***

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

19. Claims 1-36 are rejected.



***Correspondence Information***

20. Any inquiry concerning this information or related to the subject disclosure should be directed to the Examiner Peter Coughlan, whose telephone number is (571) 272-5990. The Examiner can be reached on Monday through Friday from 7:15 a.m. to 3:45 p.m.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor David Vincent can be reached at (571) 272-3080. Any response to this office action should be mailed to:

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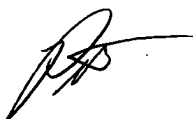
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(571) 272-3150 (for formal communications intended for entry.)

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Peter Coughlan

1/28/2008

 1/28/08  
DAVID VINCENT  
SUPERVISORY PATENT EXAMINER